

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-14 (canceled)

Claim 15 (currently amended): In a system for controlling the transmission power of a base station configured to communicate with a plurality of mobile stations, said base station comprising:

a plurality of power command units each configured to receive a signal intended for one of said plurality of mobile stations and a power command signal sent by one of said plurality of mobile stations;

a plurality of summation units each configured to form a sub-composite signal from a group of input signals having a given priority level transmitted by the plurality of power command units;

a plurality of attenuation units each configured to attenuate the sub-composite signal transmitted by respective one of the plurality of summation units by applying respective attenuation coefficients; and

a summer configured to form a composite signal to be transmitted to said plurality of mobile stations from signals transmitted by the plurality of attenuation units,

wherein the attenuation coefficient of each of the plurality of attenuation units is a power P of a base attenuation coefficient, the value of P being identical for all said attenuation units, and

wherein the value of the attenuation coefficient of each of the plurality of attenuation units is less than one, the value of the attenuation coefficient of each of the plurality of attenuation units being closer to one for sub-composite signals having high priority level.

Claims 16-17 (canceled)

Claim 18 (previously presented): A system for controlling the transmission power of a base station according to Claim 15, wherein an input signal intended for a mobile station is assigned to a sub-composite signal at the beginning of the communication.

Claim 19 (previously presented): A system for controlling the transmission power of a base station according to Claim 15, wherein an input signal intended for a mobile station is assigned to a sub-composite signal, the input signal being modified only at the time of the arrival of at least one event related to said mobile station.

Claim 20 (previously presented): A system for controlling the transmission power of a base station according to Claim 19, wherein the at least one event is a change in type of service, reaching of the saturation level, or entry into soft handover of said mobile station.

Claim 21 (currently amended): A method for controlling the transmission power of a base station configured to communicate with a plurality of mobile stations, comprising:
forming groups of input signals according to predetermined priority criteria assigned to said input signals;
forming respective sub-composite signals from said input signals of each group;

attenuating said sub-composite signals by applying respective attenuation coefficients;
and

forming a composite signal from said attenuated sub-composite signals which is transmitted to said mobile stations, the composite signal being always less than a predetermined power,

wherein the attenuating comprises:

attenuating said sub-composite signals by selecting a larger value for said attenuation coefficient for the sub-composite signal formed from the input signals having a high priority level,

attenuating said sub-composite signals by selecting the attenuation coefficients having a same power P of a base attenuation coefficient, the variation of said attenuation coefficients being obtained by variation of said value of the power P, and attenuating said sub-composite signals by selecting the value of the base attenuation coefficient so that the value of the attenuation coefficient of each of the plurality of attenuation units is less than one, and is closer to one for sub-composite signals having a high priority level.

Claims 22-23 (canceled)

Claim 24 (currently amended): A method for controlling the transmission power of a base station according to Claim [[23]] 21, wherein the attenuating comprises attenuating said sub-composite signals by selecting the value of P so as not to exceed said predetermined power.

Claim 25 (canceled)

Claim 26 (previously presented): A method for controlling the transmission power of a base station according to Claim 21, wherein the forming of groups comprises forming of groups of input signals by assigning an input signal intended for a mobile station to a group for forming a sub-composite signal at the beginning of the communication.

Claim 27 (previously presented): A method for controlling the transmission power of a base station according to Claim 21, wherein the forming of groups comprises forming of groups of input signals by assigning an input signal intended for a mobile station to a group for forming a sub-composite signal, and modifying the input signal only at the time of the arrival of at least one event related to said mobile station.

Claim 28 (previously presented): A method for controlling the transmission power of a base station according to Claim 27, wherein the modifying comprises modifying the input signal only at the time of a change in type of service, reaching of the saturation level, or entry into soft handover of said mobile station.

Claim 29 (previously presented): A system for controlling the transmission power of a base station according to Claim 15, wherein the value of attenuation coefficient is large for sub-composite signals having a high priority level.

Claim 30 (previously presented): A system for controlling the transmission power of a base station according to Claim 15, wherein the value of attenuation coefficient is small for sub-composite signals having a low priority level.

Claim 31 (currently amended): A method for controlling the transmission power of a base station according to Claim 24, wherein the attenuating comprises configured to communicate with a plurality of mobile stations, comprising:

forming groups of input signals according to predetermined priority criteria assigned to said input signals;

forming respective sub-composite signals from said input signals of each group; attenuating said sub-composite signals by applying respective attenuation coefficients; and

forming a composite signal from said attenuated sub-composite signals which is transmitted to said mobile stations, the composite signal being always less than a predetermined power,

wherein the attenuating comprises:

attenuating said sub-composite signals by selecting a larger value for said attenuation coefficient for the sub-composite signal formed from the input signals having a high priority level,

attenuating said sub-composite signals by selecting the attenuation coefficients having a same power P of a base attenuation coefficient, the variation of said attenuation coefficients being obtained by variation of said value of the power P,

attenuating said sub-composite signals by selecting the value of P so as not to exceed said predetermined power, and

attenuating said sub-composite signals by selecting the value of the base attenuation coefficient so that the value of attenuation coefficient of each of the plurality of the attenuation units is less than one, and is closer to one for sub-composite signals having a high priority level.